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California
Environmental
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Agency



Air Resources Board

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Pete Wilson
Governor

Peter M. Rooney
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Protection

December 22, 1997

Carl Griffin
Healy Systems, Inc.
17 Hampshire Drive
Hudson, New Hampshire 03051

#97-20

Dear Mr. Griffin:

Healy System Monitor and Low Vacuum Alarm Specifications

Thank you for your letters dated December 4 and December 8, 1997, regarding the Healy Monitoring System and the nuisance low vacuum alarms. Apparently the nuisance alarms occur after prolonged periods without sales when the vacuum in the under vapor piping bleeds down or at the beginning of the day when a station is first opened. When the vacuum pump is started, the period of time for the system to reach the minimum operating vacuum level of 65" water column (W.C.) in the underground vapor piping can exceed the current 10 seconds programmed into the system monitor. This problem can be more prevalent in installations with 3" diameter vapor return lines which need additional time to bring the vacuum to the system working level due to the larger internal volume of the vapor piping.

As you requested, the period of time for the system to reach the minimum operating vacuum level of 65" W.C. in the underground vapor piping can be increased from 10 seconds to 15 seconds based upon the following engineering evaluation:

The minimum operating vacuum level of 65" W.C. was established in Executive Order G-70-165 to accommodate simultaneous fueling events. The vapor recovery efficiency of a single nozzle fueling should not be jeopardized by a lower vacuum level because a single nozzle requires less than the 65" W.C. specified in the Executive Order. By increasing the alarm time to 15 seconds, the system would have adequate time to reach the required minimum of 65" W.C. without alarming and the vapor recovery integrity for a single fueling event would not be compromised. Since most single fueling events and certainly all simultaneous fueling events will exceed 15 seconds, a true low vacuum alarm would sound if the minimum vacuum level were not reached after the specified time.

I find that increasing the low vacuum alarm time from 10 seconds to 15 seconds will not adversely affect the performance of the Healy 600 Vapor Recovery System. Therefore, increasing the low vacuum alarm time from 10 seconds to 15 seconds is approved for the Healy System Monitor as certified in Approval Letter 97-6.

The new settings for the Healy System Monitor are to be as follows:

Vent Test Period	0024(hours)
Max. Vent Period	0010(hours)
Max. Vent Error Before Alarm	0001
Max. Run Startup Time	0015 (secs)
Max. Vac Err. Before Alarm	0003

If you have any questions or wish to discuss this matter further, please call Paul Thalken at (916) 445-0383 or Laura McKinney at (916) 327-1525.

Sincerely,

INTERNET VERSION

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cc:

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